

United States Department of Agriculture

Animal and Plant Health Inspection Service

Food Safety and Inspection Service

# Bovine Spongiform Encephalopathy (BSE) Response Plan Summary

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#### Introduction

he mission of the U.S. Department of Agriculture (USDA) is to enhance the quality of life for the American people by supporting production agriculture; ensuring a safe, affordable, nutritious, and accessible food supply; caring for agricultural, forest, and range lands; supporting sound development of rural communities; providing economic opportunities for farm and rural residents; expanding global markets for agricultural and forest products and services; and working to reduce hunger in America and throughout the world.

USDA's Animal and Plant Health Inspection Service (APHIS) is responsible for ensuring the health and care of animals and plants. APHIS improves agricultural productivity and competitiveness and contributes to the national economy and the public health. USDA's Food Safety and Inspection Service (FSIS) is responsible for protecting the Nation's meat and poultry supply—making sure it is safe, wholesome, unadulterated, and properly labeled and packaged. These two agencies have come together to lead USDA's actions in the prevention, monitoring, and control of bovine spongiform encephalopathy (BSE) in the U.S. livestock and food supply.

The public knows BSE as "mad cow disease," a disease linked to human cases of new-variant Creutzfeldt–Jakob disease (nvCJD). USDA knows BSE as the disease that devastated the livestock industry in the United Kingdom and shattered consumer confidence in Europe. BSE has affected international trade and all aspects of the animal and public health communities. It has called even

greater attention to the U.S. Government's accountability for a safe food supply.

No case of BSE has ever been found in the United States. Since 1989, USDA has had a number of stringent safeguards in place to prevent BSE from entering the country. USDA conducts an ongoing, comprehensive interagency surveillance program for BSE. This surveillance program allows USDA to monitor actively for BSE to ensure immediate detection in the event that BSE were to be introduced into the United States.

Immediate detection allows for swift response. As an emergency preparedness measure, USDA has developed this BSE Response Plan to be initiated in the event that a case of BSE is diagnosed in the United States. The Plan details comprehensive instructions for USDA staff as to who is to do what, when, where, and how in the event that BSE were to be diagnosed in the United States.



APHIS and FSIS have come together to lead USDA's actions in the prevention, monitoring, and control of bovine spongiform encephalopathy (BSE) in U.S. livestock and the food supply.

### **Background**

PHIS is responsible for being prepared for potential foreign animal disease outbreaks. The purpose of such preparation is to provide a step-by-step plan of action in the event that a foreign animal disease, such as BSE, is detected in the United States. These plans, often referred to as "Red Books," provide guidance by outlining certain actions that should take place, such as identification of a suspect animal, laboratory confirmation, epidemiologic investigation, and animal and herd disposition activities. Copies of Red Books for specific foreign animal diseases are distributed to agency headquarters and each regional and field office to have in preparation for a disease outbreak.

In 1990, APHIS developed a plan to respond to a confirmation of BSE in the United States. In August 1996, a joint APHIS–FSIS working group updated the BSE Red Book in accordance with current science and research surrounding BSE and the related family of diseases called transmissible spongiform encephalopathies (TSE's). The BSE Red Book is officially entitled *BSE Emergency Disease Guidelines*.

The APHIS–FSIS working group determined that the BSE Red Book, which detailed laboratory and field activities to be carried out in an emergency, needed another component. After the March 1996 announcement by the United Kingdom that BSE was linked to nvCJD, it became apparent to the working group that the Plan needed to address communication issues, both internally within USDA and the Federal Government and externally to the public at large. A confirmed case of BSE would affect

such a vast array of stakeholders—consumers, cattle producers, the food animal industry, international trading partners, animal and public health communities, media, and others. Having clear, accurate information readily available would build trust and credibility and facilitate any response measures needed. There needed to be a notification plan. Who was responsible for notifying who, what, when, and how? The Plan needed to identify clear channels of communication as to ensure immediate collection and dissemination of accurate information.

The joint APHIS-FSIS working group became formally known as the BSE Response Team and is responsible for the development of this BSE Response Plan. BSE Response Team members represent a mix of backgrounds and expertise, including veterinary medicine, food safety, public health, epidemiology, pathology, international trade, and public affairs. The Team is coordinated by two Team leaders, one each from APHIS and FSIS, who serve as liaisons and technical advisors to their respective agencies on regulations and policies regarding BSE.

Over the past 2 years, the BSE Response Plan has been reviewed, edited, revised, and approved by officials at all levels of APHIS, FSIS, and USDA. The Plan has also been shared with other Government agencies, such as the Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC), and the National Institutes of Health (NIH), and other stakeholders, such as the Animal Ag Coalition.

The BSE Response Team monitors and assesses all ongoing events and research findings regarding TSE's. The Team leaders are responsible for ensuring that prevention and diagnostic measures are continually revised and adjusted as new information and knowledge become available.

## Notification: Roles and Responsibilities

#### Surveillance

As part of USDA's surveillance program for BSE in the United States, veterinary pathologists and field investigators from APHIS and FSIS have received training from British counterparts in diagnosing BSE. FSIS inspects cattle before they go to slaughter; these inspection procedures include identifying animals with central nervous system conditions. Animals with such conditions are considered suspect for BSE, prohibited from slaughter, and referred to APHIS for examination as explained below.

Pathologists at APHIS' National Veterinary Services Laboratories (NVSL) histopathologically examine the brains from these condemned animals. In addition, samples are tested using a technique called immunohistochemistry, which tests for the presence of the protease-resistant prion protein (a marker for BSE). NVSL also examines samples from neurologically ill cattle and nonambulatory ("downer") cattle identified on the farm or at slaughter and from rabiesnegative cattle submitted to veterinary diagnostic laboratories and teaching hospitals.

#### **Notification**

Because of their responsibility for examining condemned or BSE-suspect animals, NVSL is the organization responsible for activating the notification and BSE response process. It is NVSL that will begin the activation of the BSE Response Plan. From the time a sample is submitted, it takes 14

to 18 days to confirm a diagnosis of BSE In the first 10 to 13 days, pathologists at NVSL have enough information to either rule out BSE or determine the need for additional tests. If it is determined that there is no evidence of BSE, the results are added to the more than 7,500 others that have also been negative. NVSL maintains these data.

If additional tests do suggest a presumptive diagnosis of BSE, an NVSL pathologist will hand carry the sample to the United Kingdom for confirmation. It is at this critical point, when NVSL suggests a diagnosis of BSE and is preparing to send the sample to the United Kingdom, that this BSE Response Plan is initiated. The Plan begins the preliminary notification from NVSL to APHIS.

#### **Preliminary Notification**

The director of NVSL is responsible for immediately notifying the APHIS, Veterinary Services (VS) deputy administrator when tests suggest a presumptive diagnosis of BSE.

Once NVSL has made a presumptive diagnosis of BSE, APHIS and FSIS field activities will also be initiated. APHIS will receive notification (either confirming or not confirming NVSL's diagnosis) from the United Kingdom anywhere between 24 and 96 hours. (The international animal health community has recognized the United Kingdom's Central Veterinary Laboratory [CVL] as the world's reference laboratory for diagnosing BSE. Other countries, including Belgium, France, Ireland, Luxembourg, the Netherlands, Portugal, and Switzerland, have all sent samples to this lab to confirm their first cases of BSE.)

#### NVSL

NVSL will provide all laboratory support in carrying out this BSE Response Plan and serve as the liaison with the CVL. NVSL will prepare its facility to receive and process additional samples from the suspect animal's progeny or herdmates or other suspects. NVSL will also coordinate any other assistance from State or university diagnostic laboratories if necessary.

#### APHIS, VS Deputy Administrator

Veterinary Services is the animal health arm of APHIS and the program responsible for carrying out field actions in response to BSE. Upon notification of a presumptive diagnosis from NVSL, the APHIS, VS deputy administrator immediately notifies the FSIS. Office of Public Health and Science (OPHS) deputy administrator. APHIS and FSIS deputy administrators will alert the BSE Response Team leaders and instruct them to assemble the BSE Response Team and activate the Response Plan. The VS deputy administrator serves as the liaison between the BSE Response Team and the APHIS administrator

The APHIS, VS deputy administrator notifies the APHIS administrator and the VS regional director of the State from which the suspect animal originated.

#### APHIS Administrator

The APHIS Administrator immediately notifies the USDA Assistant Secretary for Marketing and Regulatory Programs. This immediate notification will be followed by an official informational memorandum from the APHIS Administrator, through the Assistant Secretary for Marketing and Regulatory Programs, to the Secretary of Agriculture. This memorandum will

be prepared by the BSE Response Team; a draft is maintained by the Team leaders in the reserved section of their Plans.

The APHIS Administrator is responsible for securing indemnity funds for depopulation of the herd if CVL confirms NVSL's diagnosis.

## Assistant Secretary for Marketing and Regulatory Programs

The Assistant Secretary for Marketing and Regulatory Programs, in conjunction with the Undersecretary for Food Safety, is responsible for notifying the Secretary. The Assistant Secretary serves as the liaison between APHIS and Department-level officials.

#### Secretary of Agriculture

The Secretary has the authority to declare a Federal emergency if appropriate and approve funding as necessary. Information will be provided to the Secretary up the chain of command from the BSE Response Team.

#### FSIS, OPHS Deputy Administrator

The OPHS Deputy Administrator, together with the APHIS, VS Deputy Administrator, alert the BSE Response Team leaders and instruct them to assemble the BSE Response Team and activate the Plan. The OPHS Deputy Administrator serves as the liaison between the BSE Response Team and the FSIS Administrator.

The OPHS Deputy Administrator is responsible for notifying the FSIS regional director in charge of the State from which the suspect animal originated.

#### FSIS Deputy Administrator

The FSIS Deputy Administrator is responsible for notifying the Undersecretary for Food Safety.

#### **Undersecretary for Food Safety**

The Undersecretary for Food Safety, in conjuction with the Assistant Secretary for Marketing and Regulatory Programs, notifies the Secretary of Agriculture.

#### APHIS, VS, Regional Director

The APHIS, VS regional director in charge of the State from which the suspect animal originated notifies the VS Area Veterinarian-in-Charge (AVIC) for that State. The regional director is the liaison between VS field staff and the VS Deputy Administrator at headquarters. In addition, the regional director shares all information with the BSE Response Team.

#### APHIS, VS, AVIC

The VS AVIC, in cooperation with State animal health authorities, is responsible for coordinating the field activities surrounding the emergency response to BSE. The AVIC assembles the local VS staff to initiate activities outlined in the BSE Red Book, including tracing the progeny and herdmates of the suspect animal and beginning an epidemiologic investigation. The VS AVIC coordinates with the State Veterinarian to quarantine the suspect animal's herd of origin. The State has the authority to order a routine quarantine for a neurological disease. The BSE Response Team surveyed every State to determine if they would utilize this authority in the event that NVSL identifies a presumptive diagnosis of BSE. All States responded that they would issue a quarantine.

#### BSE Response Team

The BSE Response Team leaders will notify each team member and instruct them to assemble in the Situation Room at APHIS headquarters in Riverdale, MD. The Team leaders are responsible for ensuring that all of the Team's duties are fulfilled. It is their responsibility to ensure that the technical information and expert recommendations reach the decisionmakers in a timely fashion. Together with VS' Emergency Programs staff, the Team leaders will obtain APHIS. VS administrative support staff in Riverdale, MD, to ready the room for use as BSE headquarters.

The Team will begin gathering and assembling information from APHIS and FSIS region and field staff. The Team will pull the draft documents from the third section in the Team leaders' manuals and begin filling in current information as it becomes available.

#### **Public Notification**

Should NVSL receive notice from CVL confirming a case of BSE, the next level of notification is activated. Each player will follow the same notification protocol as described above for preliminary notification to confirm the diagnosis of a case of BSE.

#### BSE Response Team

The BSE Response Team will complete the informational memorandum for the Secretary.

The Team will prepare the letter to the Office of International Epizootics (OIE), the international animal health organization, for signature by the APHIS, VS Deputy Administrator. OIE requires that all countries submit official notification within 24 hours of confirming a diagnosis of BSE.

The BSE Response Team and the office of the APHIS, VS Deputy Administrator would coordinate a teleconference to inform all APHIS regional directors and AVIC's.

The BSE Response Team and the office of the FSIS, OPHS Deputy Administrator would coordinate a teleconference to inform all regional and field FSIS offices.

The BSE Response Team would coordinate a teleconference to notify other Federal agencies.

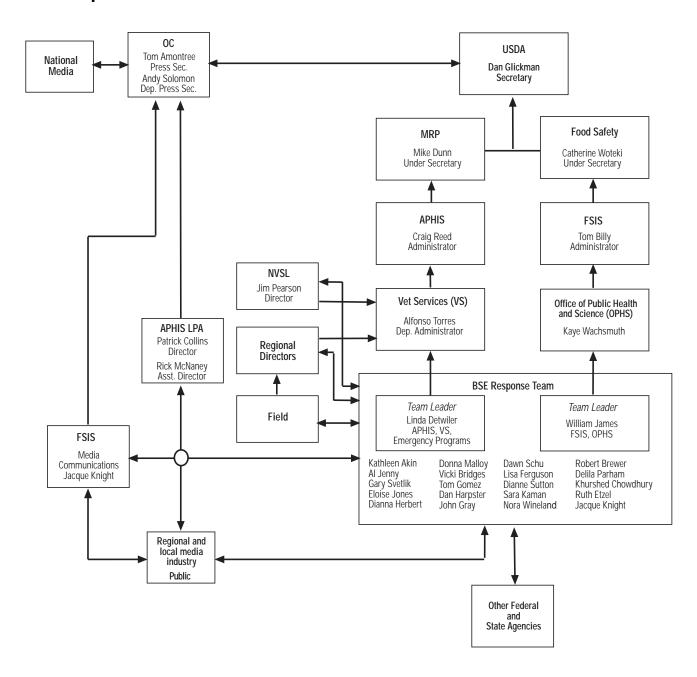
The BSE Response Team would coordinate a teleconference to notify key industry/consumer representatives.

The BSE Response Team and APHIS' International Services would notify foreign embassies.

The BSE Repsonse Team would establish a toll-free 800 telephone line for industry representatives, reporters, and the public.

The BSE Response Team would coordinate with APHIS Legislative and Public Affairs and USDA Office of Communications to issue a press release the day the diagnosis is confirmed. The press release would announce a press conference to be held the morning after the diagnosis is confirmed.

## **BSE Response Plan Flow Chart**



# BSE Response Timeline

Presumptive diagnosis of BSE identified		Day 1 Case confirmed	Day 2	Day 3
NVSL Suspect diagnosed	H&E slides prepared and read Immunohistochemistry Hand carried to UK	Diagnosis confirmed in concurrence with CVL, UK		Readiness status to receive and process brain specimens on any herdmates, progeny or other suspects (see BSE Laboratory Testing timeline)
APHIS Field Personnel Routine State Quarantine of herd	Trace progeny Trace adult herdmates Epi investigation (ongoing)	Expand quarantine to include progeny		Complete animal trace out on herdmates and progeny
FSIS ERP, Field Operations Obtain carcass disposition Obtain animal identification/origin information	Trace all food items Trace to renderer	Districts notify all field personnel of confirmation		Complete trace out on brain, spinal cord
BSE Response Team (Riverdale) Assemble BSE Response Team	Update information packet, briefing papers, etc. Obtain funds for depopulation	Confirmation received Statement to Secretary APHIS/FSIS teleconference Government/Industry/ Consumer teleconference Distribute information packet Notify OIE Notify embassies MRP Alert Press Release	Conduct briefings Congressional briefing Press conference	Provide daily/weekly briefing updates as needed Hold daily/weekly conference calls to government agencies and industry Update USDA, APHIS, FSIS homepages Provide daily updates on trade restrictions placed on US Fax updates to APHIS and FSIS field, FAS, NASDA, USTR, and industry groups

## **BSE Response Plan Checklist**

## Initial BSE Case

Action	Respnsibility	Date	Progress
Presumptive Dx	NVSL/EP		
Immediate notification to USDA Sec., Undersec., Asst. Secs., Administrators	EP Staff		
Advance notification to key contacts at CDC, FDA, NIH	USDA officials		
If slaughter sample trace to farm of origin	FSIS/APHIS		
Traceout of product if slaughter animal	FSIS, ERP		
Quarantine index herd	VS Area/State	Immediately upon presumptive dx	
Herd epidemiological investigation	VS Area/State	Ongoing while dx confirmed	
Progeny traceouts	VS Area/State	Ongoing	
Movement traceouts	VS Area/State	Ongoing	
Prepare situation room	EP Staff	Immediately after presumptive dx	
Assemble BSE Response Team in Riverdale, MD	EP Staff Chief	Immediately after presumptive dx	
Identify spokespersons and backups	APHIS/FSIS Administrator	During time waiting for confirmation	Completed
Update press releases, info package for APHIS/FSIS offices; info pkg. for industry etc.	EP/BSE Response Team	During time waiting for confirmation	

Continued

Action	Respnsibility	Date	Progress
Designate individual to post and update APHIS home page; designate individual to monitor internet and list servers	EP/BSE Response Team		
Set up phone lines (800 numbers)	EP/BSE Response Team	During time waiting for confirmation	
Confirm Dx	NVSL in concurrence with CVL, England		

### **After Confirmation**

Action	Respnsibility	Date	Progress
Briefing for Sec/Asst. Sec (paper and in person)	Administrators, Communications Liaison		
Provide advance notification to AVIC's/State Vets; NIH, CDC, FDA; Select industry and trading partners (teleconference)	APHIS/FSIS Administrators EP/BSE Response Team	Immediately after confirmation (near end of day)	
Congressional briefing	Asst. Sec., Admin., Spokesperson	After teleconference	
Information pkg. to APHIS, FSIS, State personnel, CSREES, ARS, GIPSA, FAS	EP/BSE Response Team	After teleconference above (at end of day)	
Information to other government, industry contacts —see list (basic info)	EP/BSE Response Team	After teleconference (at end of day)	
MRP Alert	LPA	Day 1	
Information to embassies	EP/BSE Response Team	After teleconference	

Continued

Action	Respnsibility	Date	Progress
Press release to media, press conference, media advisory to APHIS and FSIS employees	LPA/EP/BSE Response Team	Day 2	
Scientific meeting with USDA, CDC, FDA, NIH	EP/BSE Response Team		
Informational meeting for industry, constituent groups	EP/BSE Response Team		
Obtain funds for depopulation	EP Staff		
Disposition of index herd	Area/State personnel		
Disposition of progeny	Area/State personnel		
Notify foreign countries	APHIS, IS/FSIS Int. personnel	Day after confirmation	
Notify all FAS posts	VS prepare for FAS transmission	Day after confirmation	

## Ongoing

Action	Respnsibility	Date	Progress
Daily updates on trade restrictions placed on US	APHIS, Chief of Import/Export Staff/ FSIS International		
Prepare daily report of updates current happenings	EP/BSE Response Team		
Prepare daily briefings for Asst. Sec/Sec	EP/BSE Response Team		
Meeting within USDA agencies to examine necessity for further controls	Administrators		